

# MACROECONOMIC IMBALANCE PROCEDURE IN THE EURO AREA – EX POST ANALYSIS

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## Abstract

Macroeconomic imbalances increase the probability of economic crisis, even more so in a monetary union with limited economic policy tools available. In the Economic and Monetary Union (EMU, euro area or eurozone), macroeconomic imbalances have accumulated since the euro introduction and they have significantly contributed to the emergence of the recent crisis with serious impacts on several Member States and hereby on the whole euro area. In order to improve the proper functioning of the EMU and prevent possible future crisis, a governance reform has been undertaken in the European Union (EU) in 2011, including introduction of a new procedure for preventing and correcting macroeconomic imbalances - the Macroeconomic Imbalance Procedure (MIP). It starts with an alert mechanism based on a set of eleven macroeconomic indicators with their threshold values (the so-called scoreboard), which this paper mainly focuses on. The first part of the paper provides an overview on the functioning of the preventive and corrective arm of the new procedure within the EU. The second part deals with the economic reasons for establishing respective MIP indicators. Finally, the third part aims to test appropriateness of the composition of the scoreboard for anticipation of the recent crisis by analysing the development of the indicators in the twelve euro area countries in period 2004-2007, i.e. prior to the outbreak of the crisis.

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**Keywords:** Euro area, Macroeconomic Imbalance Procedure, scoreboard of indicators, crisis

## Introduction

In a monetary union such as the EMU, the Member States abandon their autonomous monetary policy as well as exchange rate policy tools. Hence, in the event that asymmetric shocks occur, the Member States have to use their fiscal policy tools and/or flexible labour markets (i.e. labour mobility or wage flexibility) for adjustments after shocks. However, within the euro area labour mobility is rather limited and wage flexibility is not

particularly high. In a period of difficult economic developments, room for fiscal policy measures is also limited. Another possible solution to face asymmetric shocks would be fiscal transfers, which, although discussed at the European level, are politically not feasible at present. In such conditions, it is very important to prevent occurrence of asymmetric shocks in the EMU by early identifying macroeconomic imbalances that could lead to these shocks and by adopting necessary measures in respective economies to reduce or eliminate the existing imbalances (Essl and Stiglbauer, 2012). This has become even more important after the outbreak of the current economic and financial crisis, followed by the debt crisis in the euro area.

The heterogeneity of the economies participating in the eurozone has made the area as a whole vulnerable to external shocks such as the recent crisis which revealed weaknesses in the governance framework underlying the functioning of the EMU. So in order to prevent possible future crisis, a governance reform has been undertaken in the European Union (EU), including introduction of a new procedure within the EU's annual cycle of economic policy guidance and surveillance (the European Semester) for preventing and correcting macroeconomic imbalances in the euro area - the Macroeconomic Imbalance Procedure (MIP). It is a surveillance mechanism that aims to identify potential risks early on, correct the imbalances that are already in place and prevent them from re-emerging. The MIP represents an integral part of economic policy coordination within the EU and in particular within the EMU, where the need for such policy coordination is even stronger.

In September 2010, the European Commission (subsequently referred to as "Commission") adopted a legislative package consisting of six proposals, the so called *six-pack* legislation, which aims to reinforce the monitoring and surveillance of fiscal, macroeconomic and structural reform policies in the EU and the euro area compared to previously applied legislation. The Ecofin Council and European Council reached an agreement on the six-pack legislation to improve EU economic governance in March 2011. As a result of discussion on economic indicators to detect macroeconomic imbalances, Ecofin/Eurogroup adopted resolution on the design of the scoreboard of indicators in November 2011. The legislation on the MIP entered into force in December that year, so it could become a part of the 2012 European semester. The MIP legislation consists of two regulations included in the six-pack: *Regulation (EU) No 1176/2011 of the European Parliament and of the Council of 16 November 2011 on the prevention and correction of macroeconomic imbalances* and *Regulation (EU) No 1174/2011 of the European Parliament and of the Council of 16 November 2011 on enforcement measures to correct excessive macroeconomic imbalances in the euro area*. Regulation 1176/2011 covers

all EU Member States and lays out the details of the surveillance procedure, while Regulation 1174/2011 applies only to euro area Member States and focuses on enforcement, including the possibility of sanctions.

### **Preventive and Corrective arm of the MIP**

As the Stability and Growth Pact (SGP)<sup>33</sup>, also the MIP consists of the preventive and corrective arm. Within the preventive arm of the procedure potential macroeconomic problems have to be identified and regularly analysed in order to detect the emergence of imbalances early-on. The corrective arm will come into effect if macroeconomic imbalances in a particular Member State prove to be serious, i.e. “excessive”.<sup>34</sup> Consequently, this Member State will be required to submit a plan for corrective measures. The corrective arm provides means to effectively enforce correction of imbalances. In case the Member State concerned fails to comply with the recommended corrective actions, sanction may be imposed.

The MIP is built as a “two-step approach”. The first step is represented by an alert mechanism which works as a filter. The objective of the alert mechanism is to focus attention on observed risks early on and identify the Member States for which, in the second step, more in-depth analysis appears warranted so as to assess their vulnerability and substantiate policy recommendations if appropriate (European Commission, 2012b). So it is in-depth analysis, and not the alert mechanism, which provides the basis for any recommendations to be addressed to the Member State under the preventive or corrective arm of the MIP.

The MIP starts with the Alert Mechanism Report (AMR), prepared by the Commission in November each year since 2012. The alert mechanism is based on the so-called scoreboard, i.e. a set of eleven (previously ten) macroeconomic indicators of external imbalances, competitiveness and internal imbalances with their threshold values established by the Commission. The threshold values are not interpreted mechanically, but in conjunction with the accompanying qualitative analysis. This approach gives the Commission both flexibility and a high degree of discretion in

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<sup>33</sup> SGP is a set of rules designed to ensure that countries in the EU pursue sound public finances and coordinate their fiscal policies.

<sup>34</sup> According to the Regulation 1176/2011, a macroeconomic imbalance means “*any trend giving rise to macroeconomic developments which are adversely affecting, or have the potential adversely to affect, the proper functioning of the economy of a Member State or of the Economic and Monetary Union, or of the Union as a whole*”, while the excessive imbalances are defined as “*severe imbalances, including imbalances that jeopardise or risks jeopardising the proper functioning of the economic and monetary union*”.

interpreting the data (Moschella, 2014). The overall number of breaches of thresholds, the severity of individual breaches as well as the combination of breaches, potentially signalling broad based problems, is also taken into account (European Commission, 2011).

Based on the results of the scoreboard and the qualitative analysis, as well as taking into account relevant data beyond the scope of the scoreboard (additional indicators) in order to get a more complete picture, the Commission identifies the Member States that face risk of excessive imbalances. In these countries a closer analysis (in-depth review) is being carried out by the Commission in collaboration with the affected Member State. The in-depth review focuses on causes and potential effects of existing macroeconomic imbalances.

Following the in-debt reviews the Commission determines whether imbalances exist and what their nature is. Depending on the severity of the imbalances the Commission proposes policy recommendation either under the preventive or under the corrective arm of the MIP. Strictly speaking, the in-depth review can lead to three different results: 1. the Commission does not detect any macroeconomic imbalances and consequently does not take any further steps; 2. the Commission detects macroeconomic imbalances and advises the Council of the EU (the Council) to issue recommendations for preventive action to the affected Member State or 3. the Commission detects excessive imbalances which could jeopardize the functioning of monetary union and advises the Council to issue recommendations for corrective action to the affected Member State.

The Excessive Imbalance Procedure (EIP) would be initiated only in cases where the in-depth review leads to the third conclusion above. This would mean starting the corrective arm of the MIP, potentially leading to sanctions for euro area Member States. If the in-depth review leads to the second point above, the European Council issues recommendations on the correction of the macroeconomic imbalances to the Member State. These recommendations are only of preventive nature and represent a part of the proposals for country-specific recommendations, which provide guidance for national policy making.

After starting an EIP under the corrective arm of the MIP, the Member State concerned must submit a corrective action plan (CAP), based on a Council recommendation. The plan must contain adequate measures for the correction of the imbalances detected and specify the implementation timetable. In case the plan is considered inadequate, the Council will issue another recommendation, based on a proposal from the Commission. Then the Member State must submit a new CAP. On the other hand, if the plan is considered adequate, the Member State will be asked to implement the corrective actions defined in the plan within the timetable. If a Member State

fails to implement the defined corrective measures adequately, the Council will issue a recommendation setting new deadlines for implementation.

The enforcement of the EIP is backed by sanctions. In the event of contraventions financial sanctions may be imposed for the euro area Member States (but not for the other EU Member States). In case of an inadequate implementation of a CAP, an interest-bearing deposit equal to 0.1% of the country's GDP will be imposed. Moreover, two consecutive negative evaluations with regard to the CAP or the implementation of corrective measures will entail an annual fine equal to 0.1% of the country's GDP. This fine will be applied until the CAP has been accepted or the implementation of the corrective measures considered being adequate. If an interest-bearing deposit with the Commission has already been imposed on the Member State, the deposit will be transformed into an annual fine. The penalties will be used for the financing of the European Stability Mechanism (ESM). The EIP will be terminated once the Council, based on a recommendation from the Commission, determines that the imbalances have been effectively eliminated.

One of the major innovations of the procedure is the use of a reverse qualified majority voting (RQMV), under which a Council decision on a Commission recommendation regarding the activation of sanctions against euro area Member States is deemed to be adopted by the Council unless it decides, by qualified majority, to reject the recommendation within ten days. Thus, RQMV enhances the likelihood that the surveillance process will proceed as planned rather than being blocked by political considerations (Moschella, 2014).

### **Indicators of the scoreboard**

In November 2011 the Commission published a Staff Working Paper presenting envisaged initial design of the scoreboard of early-warning indicators for the surveillance of macroeconomic imbalances (European Commission, 2011). The proposal contained ten indicators and considered an additional indicator on the banking/financial sector that would be developed by the end of 2012. The design of the scoreboard is based on a set of four principles: 1. The choice of indicators focuses on the most relevant dimensions of macroeconomic imbalances and competitiveness losses, with a particular emphasis on the smooth functioning of the euro area. 2. The scoreboard indicators and thresholds should provide a reliable signalling device for potentially harmful imbalances and competitiveness losses at an early stage of their emergence (thresholds established with a statistical approach based on the distributions of the indicators' values identifying the thresholds as the lower and/or upper quartiles of the distributions; such thresholds are consistent with the values found in some empirical studies in

the available economic literature). 3. The scoreboard has an important communication role. 4. Indicators are of high statistical quality in terms of timeliness and comparability across countries.

Nowadays the scoreboard used for AMRs consists of eleven indicators (including indicator on the financial sector) with their indicative thresholds. The indicators include both stock and flow indicators which can capture shorter-term deteriorations as well as the longer-term accumulation of imbalances. The economic rationale behind the inclusion of individual indicators into the scoreboard, the transformations used and the determination of threshold values is in short as follows (European Commission, 2012b):

### ***Current account balance***

- 3 year backward moving average of the current account balance as percentage of GDP, with indicative thresholds of +6% and -4%

The current account balance is one of the most significant indicators in explaining crisis incidence. The economy with a high current account deficit is borrowing and importing in excess of its exports. Surveillance under the MIP covers also current account surpluses; however, a greater degree of urgency is required in economies with large current account deficits and competitiveness losses. Hence the need for policy action is strong in economies with large deficits of the current account; however, also the Member States with large current account surpluses should implement the reforms focusing on strengthening their domestic demand. The average over three years is used in calculation in order to provide indications of the persistence of a potential imbalance. The indicative threshold for current account deficits of -4% was derived from the historical data for the EU Member States, using a simple statistical distribution analysis. The upper value of the threshold is set at +6%.<sup>35</sup>

### ***Net international investment position (NIIP)***

- NIIP as percentage of GDP, with an indicative threshold of -35%

The NIIP as the net financial position (assets minus liabilities) of the domestic sectors of the economy versus the rest of the world is the stock counterpart to the current account balance. Persistently high current account deficit leads to highly negative NIIP. Calculation as a share of GDP allows for cross-country comparability. Value for the last available year is used and the indicative threshold is -35% of GDP. However, besides the level also

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<sup>35</sup> The initial scoreboard used by the Commission had the same 4% trigger point for the current account imbalance, whether this was a surplus or a deficit. However, this was later changed into an asymmetric trigger: +6% for surplus countries and 4% for deficit countries (De Grauwe, 2012).

composition of assets and liabilities in terms of maturities is an important factor when assessing the overall vulnerability of the external position of a Member State.

### ***Real effective exchange rates (REER)***

- 3 years percentage change of the REER based on HICP/CPI deflators, relative to 41 other industrial countries, with indicative thresholds of  $-/+5\%$  for euro area countries and  $-/+11\%$  for non-euro area countries

The indicator of the REER is based on consumer prices in order to capture the drivers of persistent changes in price and cost competitiveness of each Member State relative to its major trading partners. The REER is frequently considered among early warning indicators. It assesses price and cost competitiveness developments and not some other aspects of competitiveness like product quality or overhead costs, so it is complemented by other scoreboard indicators such as export market shares. Symmetric indicative thresholds are used and they differ between the euro-area ( $-/+5\%$ ) and non-euro-area Member States ( $-/+11\%$ ).

### ***Export market shares***

- 5 years percentage change of export market shares measured in values, with an indicative threshold of  $-6\%$

This indicator aims at capturing structural losses in competitiveness. Changes in export market shares can be driven by the increase/decrease of a country's export volume (numerator effect) but also by the growth of total world exports in goods and services (denominator effect). So countries can lose market shares because their exports grow more slowly than total world exports. The percentage change over five years of exports for each country as share of the world exports allows for measuring long-term competitiveness development. The indicative threshold of the export market share indicator corresponds to cumulative losses of  $6\%$  over a period of five years.

### ***Nominal unit labour cost (ULC)***

- 3 years percentage change in ULC, with indicative thresholds of  $+9\%$  for euro area countries and  $+12\%$  for non-euro area countries

The indicator of nominal ULC monitors developments in price and cost competitiveness across the EU Member States. A rise in an economy's nominal ULC corresponds to a rise in labour costs that exceeds the increase in labour productivity. If other costs are not adjusted in compensation, economy's cost competitiveness can be threatened. The three-year percentage change is used in order to capture the medium term developments of labour costs. The indicative threshold for the euro area countries is  $9\%$ , for non-euro-area countries  $12\%$ . Together with the REER indicator, the ULC

indicator allows a comprehensive assessment of the cost/price competitiveness developments in the Member States.

### ***House price index***

- year-on-year changes in house prices relative to a Eurostat consumption deflator, with an indicative threshold of 6%

Large movements in housing markets can be an important source of macroeconomic imbalances and have been associated with several economic crises. The consumption deflator is used in calculation to reflect the value of house prices relative to the whole consumption basket.

### ***Private sector debt***

- private sector debt (consolidated) as a percentage of GDP with an indicative threshold of 133% (previously 160%)

Excessively high private sector debt increases the vulnerability to economic shocks. The indicative threshold of private sector debt is 133% GDP; however, there is no firm evidence from the literature on an optimal level of debt in the economy.

### ***Private sector credit flow***

- private sector credit flow as a percentage of GDP with an indicative threshold of 14% (previously 15%)

Private sector credit flow includes loans and securities other than shares. This indicator is the flow counterpart of private sector debt (a stock indicator). Quickly expanding credit is considered as one of the best predictors of financial or banking crises. Credit growth is also a good early warning indicator for house price booms and there is a potentially important link between credit growth and external imbalances.

### ***General government sector debt***

- general government sector debt as a percentage of GDP with an indicative threshold of 60%

A high level of general government debt increases the vulnerability of a Member State, weakens its room of manoeuvre to deal with crisis situations and is even more worrying when it is accompanied by large private sector debt. The indicator for general government debt is therefore included in the scoreboard to provide a broader picture of Member States' indebtedness, not to monitor risks of unsustainable public finances, which are covered by the SGP. The Treaty reference value of 60% of GDP is used as the indicative threshold for this indicator, as a separate threshold under the MIP would be confusing.



### ***Unemployment rate***

- 3-year backward moving average of unemployment rate, with an indicative threshold of 10%

The indicator of unemployment rate helps to better understand the potential severity of macroeconomic imbalances in terms of their likely persistence and the capacity of the economy to adjust. The indicator is defined as the 3-year backward average of the unemployment rate which was preferred to yearly figures, strongly influenced by short term volatility.

### ***Financial sector liabilities***

- year-on-year percentage change in total financial sector liabilities, with an indicative threshold of 16.5%

This indicator has become the eleventh indicator of the scoreboard (European Commission, 2012a) and was included in the scoreboard for the second AMR published in November 2012. It aims at better capturing the interlinkages between the real economy and the financial sector. Experience has shown that a fast expansion of the financial sector has often preceded financial crises. While the European Systemic Risk board (ESRB) monitors financial stability risks, the MIP looks at the financial sector from the point of view of macroeconomic imbalances.

The appropriateness of the scoreboard of indicators is regularly reviewed by the Commission from the view of the composition of indicators, the methodology used and the indicative thresholds established. In line with the MIP legislation, it is possible to add new or better-quality indicators to the scoreboard or replace some of the existing indicators. Besides the scoreboard results, the economic reading takes into account other relevant information and the broad economic context using complementary additional indicators which are also reported in the AMRs. This includes growth and employment developments, nominal and real convergence, as well as productivity developments.

Four AMRs have been already published and few modifications have been made. However, according to some authors, the MIP still suffers from severe shortcomings, e.g. with respect to the surveillance of competitiveness divergences and current account imbalances (Hallwirth, 2014) or due to its predominant single-country focus (Moschella, 2014; Ederer, 2015), and the limited integration of macroeconomic and financial analyses, which may lead to missing important systemic developments. In addition, the MIP regulations remain relatively vague on the criteria to establish “excessive imbalances” in a country (Kamps et al, 2013).

### **Development of the MIP indicators in selected EMU Member States before the recent crisis**

We have analysed available data for the indicators of the MIP scoreboard in the period 2004 – 2007, i. e. prior to the outbreak of the global financial and economic crisis, in order to test whether the indicators and thresholds established would have allowed to identify macroeconomic imbalances early on and thus anticipated the crisis. We have chosen twelve EU Member States using euro as the official currency in the period analysed, namely Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxemburg, Netherlands, Portugal and Spain.<sup>36</sup> Hence, table 1 with indicator values for 2004 – 2007 contains only indicative thresholds for the euro area Member States for REER and ULC. Figures falling outside the thresholds established by the Commission in the AMR are highlighted in grey.

As seen in the table, the countries analysed can be divided into two groups with different characteristics. For the first group, the group of countries more or less belonging to the so called core of the EMU (or the North eurozone): Germany, Austria, Luxembourg, Netherlands, Finland, Belgium, France, current account surpluses (in several countries large)<sup>37</sup>, positive or only moderately negative NIIPs, modestly growing ULC, real exchange rate depreciation (apart from Belgium and Luxembourg), relatively lower indebtedness of the private sector in most countries and government debts below or slightly over the threshold (apart from Belgium), slower growing private credit flows and only moderately expanding financial sectors were typical in the period analysed.

On the other hand, the second group consisting of euro area periphery economies (South eurozone, apart from Ireland; sometimes called GIIPS: Greece, Ireland, Italy, Portugal, Spain), was characterised by relatively large current account deficits (apart from Italy), highly negative NIIPs (apart from Ireland and again Italy), a significant rise in nominal ULC, real exchange rate appreciation, quickly expanding private sector credit flows (apart from Italy), high overall indebtedness as well as a fast expansion of the financial sector (apart from Italy and Portugal) and increase of real estate prices (in particular in Spain, Ireland).<sup>38</sup>

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<sup>36</sup> A similar analysis has been conducted by Essl and Stiglbauer (2012) who used a smaller sample of countries, ten indicators and data for a shorter period.

<sup>37</sup> Gross (2012), in his analysis, left France out of as its current account behaviour exhibits a mixed feature, surplus until 2006 and deficit afterwards.

<sup>38</sup> According to Gross (2012), Italy is in a position similar to the one of France (i.e. not sharing clearly the features of either group).

Table 1

**The indicators of the scoreboard in selected euro area Member States in the pre-crisis period (2004 – 2007; figures highlighted are the ones falling outside the thresholds established by the AMR)**

Indicator		External Imbalances and Competitiveness					Internal Imbalances					
		Current account balance as % of GDP	Net international investment position as % of GDP	Real effective exchange rate	Export market shares	Nominal ULC	% y-o-y change in deflated house prices	Private sector debt as % of GDP, consolidated	Private sector credit now as % of GDP, consolidated	General government sector debt as % of GDP	Unemployment rate	% y-o-y change in total financial sector liabilities
		3 year average		% change (3 years)	% change (5 years)	% change (3 years)					3 year average	
Thresholds		4%/6%	-35%	±5%	-6%	9%	6%	133%	14%	60%	10%	16.5%
Austria	2004	2,2	-17,3	4,5	5,2	1,9	-3,6e	124,5	4,1	64,8	4,5	11,0
	2005	2,0	-21,7	2,6	12,6	2,8	2,5e	124,0	6,8	68,3	4,8	22,4
	2006	2,4	-12,9	-1,7	1,3	2,6	2,0e	126,1	5,4	67,0	5,0	9,2
	2007	2,8	-9,8	-1,8	0,7	3,8	2,0e	127,2	8,1	64,8	4,8	11,0
Belgium	2004	3,7	28,4	6,2	na	2,5	6,3	120,4	9,4	96,6	8,0	14,2
	2005	2,9	33,5	5,0	-7,4	1,7	9,7	121,9	6,3	94,8	8,4	15,7
	2006	2,3	29,4	0,5	-15,8	2,8	6,5	120,3	6,5	90,8	8,4	10,8
	2007	1,9	28,9	0,2	-10,3	5,8	4,7	133,9	18,0	86,9	8,1	15,5
Finland	2004	6,2	-9,3	6,7	-2,2	1,6	7,7	106,0	6,5	42,7	9,0	13,4
	2005	4,5	-14,0	1,6	-6,3	2,8	7,1	114,7	12,7	40,0	8,7	13,9
	2006	4,2	-12,4	-5,5	-8,0	3,7	5,6	117,9	8,8	38,2	8,3	12,6
	2007	3,6	-25,9	-4,9	-5,9	3,8	3,9	122,3	13,0	34,0	7,7	10,2
France	2004	0,8	-4,7	9,3	-13,4	5,8	12,7	104,8e	5,7e	65,5	8,7i	9,8
	2005	0,4	1,1	6,0	-7,4	5,1	13,2	109,2e	8,2e	67,0	8,8	15,1
	2006	0,2	1,1	-0,5	-14,9	4,8	9,8	112,6e	9,2e	64,2	8,9	15,1
	2007	-0,1	-1,5	-1,5	-18,1	5,7	3,6	115,6e	11,2e	64,2	8,6	12,6
Germany	2004	2,6	10,7	7,4	5,0	1,3	-2,6	119,0p	-1,7p	64,6	9,7	3,9p
	2005	3,5	21,0	4,6	9,5	0,0	-0,3	117,1p	0,3p	66,8	10,5	6,3p
	2006	5,0	27,9	-1,5	2,0	-2,9	-1,5	114,1p	1,3p	66,3	10,7	4,8p
	2007	5,8	26,5	-1,5	0,6	-2,9	-3,7	111,0p	2,0p	63,5	10,1	8,1p
Luxemburg	2004	9,5	116,1	6,5	14,6	7,3	11,7	na	na	6,5	3,8	14,8
	2005	10,2	133,5	6,6	15,5	5,6	8,1	na	na	6,3	4,5	31,4
	2006	11,3	140,5	3,3	18,4	6,9	8,3	na	na	7,0	4,7	16,1
	2007	10,7	105,0	2,4	23,0	8,4	4,8	na	na	7,2	4,5	12,2
Netherlands	2004	5,3	3,7	7,9	-2,4	7,4	2,2	214,1	5,1	50,0	4,1	5,9
	2005	6,9	-2,6	3,2	1,7	1,9	3,3	217,7	12,3	49,4	4,9	16,4
	2006	8,1	3,2	-2,1	-4,4	-0,5	1,8	217,7	13,6	44,9	4,9	12,4
	2007	7,8	-6,0	-2,1	-2,7	1,5	2,5	216,8	13,1	42,7	4,4	15,0
Greece	2004	-6,3	-67,0	10,4	21,6	12,8	-0,5e	74,4	11,4	98,9	10,2	8,9
	2005	-6,7	-77,3	6,4	6,3	12,1	7,8e	86,2	14,3	101,2	10,1	16,8
	2006	-8,3	-85,4	0,3	-4,8	9,6	9,6e	93,0	16,3	103,4	9,9	14,1
	2007	-11,2	-96,1	-0,4	3,8	10,6	2,5e	101,9	16,2	103,1	9,1	22,0
Ireland	2004	-0,6	-17,9	18,4	12,6	10,7	9,3	150,1	23,7	28,3	4,5	20,0
	2005	-2,1	-24,5	12,1	5,9	14,8	6,5	171,2	33,8	26,2	4,5	35,1
	2006	-4,2	-5,3	2,7	-12,5	12,8	11,9	191,7	41,0	23,8	4,5	21,3
	2007	-6,7	-19,5	3,1	-15,4	14,3	4,3	198,1	24,9	24,0	4,5	9,6
Italy	2004	-0,6	-16,7	11,0	-6,8	11,0	3,6	89,7	7,5	100,0	8,3	7,2
	2005	-0,8	-17,7	6,8	-5,0	9,2	5,4	95,9	9,6	101,9	8,0	12,1
	2006	-1,0	-22,8	-0,5	-12,6	7,0	3,1	102,2	10,4	102,5	7,5	10,5
	2007	-1,3	-24,1	-1,2	-10,0	6,5	2,6	109,6	11,9	99,7	6,9	0,6
Portugal	2004	-8,0	-66,8	9,0	-4,1	7,1	-1,6	165,8	13,0	62,0	6,8e	6,4

	2005	-8,5	-69,9	5,3	-3,5	7,4	-1,4	171,4	12,0	67,4	7,7e	10,7
	2006	-9,6	-79,3	0,7	-4,4	4,3	-1,5	176,5	12,6	69,2	8,2e	13,8
	2007	-10,1	-88,8	0,6	-4,5	5,1	-1,9	185,0	18,2	68,4	8,7e	10,2
Spain	2004	-4,0	-51,9	10,8	2,5	9,4	13,0e	137,8	19,5	45,3	11,3	16,3
	2005	-5,4	-55,6	7,8	5,5	9,6	8,0e	154,9	26,9	42,3	10,6	25,3
	2006	-7,2	-65,8	3,1	-3,2	10,0	11,2e	177,8	35,2	38,9	9,6	20,0
	2007	-8,8	-78,1	2,7	-3,2	11,3	6,3	191,9	26,0	35,5	8,6	16,8

Flags: e – estimated, na – not available, p – provisional.

Source: European Commission (2014).

Current account balances across the euro area countries have developed very differently over the first ten years of the euro. The Southern European economies built up large current account deficits vis-à-vis the Northern euro area countries and experienced a massive loss of competitiveness. Data for current account balance in 2004 – 2007 in Table 1 provide evidence of this development. Current account imbalances derived both from structural competitiveness factors (different countries' restructuring and outsourcing of production) and from the asymmetric macroeconomic effects of the EMU on creditor and debtor countries (sharing a common currency) (Guerrieri, 2012). By removing exchange rate risk, the introduction of the euro encouraged massive capital flows to, and large current account deficits in the South eurozone. Meanwhile, there have been large current account surpluses in Northern countries. To some extent, these deficits may reflect the higher investment needs in the lower-income countries in Southern Europe as they lag behind in terms of economic development. But sustaining such imbalances has serious consequences for the economy and the euro. The excessive demand boom in the peripheral countries was promoted by private and public consumption and residential investment spending.<sup>39</sup> This led to persistent inflation, strong increase of ULC, loss of competitiveness, and asset price inflation – notably in the housing market, so gaps in competitive positions widened in the two groups of countries. These developments were not sustainable.

While little attention was paid to these imbalances for many years, the recent crisis has shed more light on them and revealed many weaknesses in the euro zone architecture. Since the start of the crisis and in particular after 2009, the large capital flows from the Northern countries have suddenly stopped, creating severe adjustment pressures. However, to correct existing imbalances in a sustainable way, both deficit (debtor) and surplus (creditor) countries have to pursue appropriate policies. According to De Grauwe (2012) as well as Ederer (2015), adjustments in surplus and deficit countries

<sup>39</sup> In Spain and Ireland, foreign capital was used to sustain massive construction booms. In Greece, Portugal and to a lesser extent Italy, foreign capital was used to finance consumption (Gross, 2012).

need to be symmetric and coordinated to prevent further destabilising developments in the EMU.

Running continued current-account deficits also adds to the national debts, whether it is in the form of government debt or private debt. There were countries in both analysed groups highly exceeding the reference value of 60% GDP for government debt (Greece, Italy, and Belgium). In contrast, Luxembourg (first group) and Ireland (second group) recorded very low general government debt ratio in the analysed period. However, while in Luxembourg government indebtedness has stayed at a low level during the crisis, in Ireland the development has rapidly changed since the outbreak of the crisis, reaching more than 120% GDP in 2012, mainly due to rescuing its insolvent banking system by the government. A significant rise in government debt ratio has been recorded also in Spain since 2008. This supports the statement that high public debts can be more the effect than the cause of the EMU crisis.

Private sector debt as percentage of GDP exceeded the indicative threshold in three economies from the second group (Ireland, Portugal, and Spain) and in two countries from the first group (Belgium and Netherlands)<sup>40</sup>. What can be considered as crucial is the fact that the overall indebtedness of both private and government sector was higher than 200% of GDP in all countries belonging to the second group in 2007. This, combined with other macroeconomic imbalances, contributed to negative development in the next years.

As regards other two indicators, export market shares and unemployment rates, the picture is mixed. From the view of changes in export market shares, France seems to be even more problematic than Italy or Ireland and in the analysed period unemployment rates only slightly exceeded the threshold in Germany, Greece and Spain.

As development after 2007 shows, it was economies from the second group that have experienced the most serious economic difficulties - recession, increase in overall indebtedness and rapid deterioration of labour market situation. Finally, financial assistance from the EU<sup>41</sup> and International Monetary Fund (IMF) has been provided to Greece (2010, 2012), Ireland (2010), and Portugal (2011) as well as to the Spanish banking sector (2012). In return they committed to implement austerity measures aimed at reducing their budget deficits and agreed to implement structural reforms in order to improve their competitiveness.

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<sup>40</sup> And probably also in Luxembourg, where data are not available for this indicator until 2008.

<sup>41</sup> The European Financial Stability Facility (EFSF), the European Financial Stabilisation Mechanism (EFSM), the European Stability Mechanism (ESM), bilateral loans from euro area Member States.

## Conclusion

As the development of the scoreboard indicators in twelve euro area Member States in 2004 – 2007 shows, a combination of several macroeconomic imbalances was present in this period. So the MIP scoreboard would have anticipated a high risk of the emergence of the crisis. The macroeconomic imbalances proved to be unsustainable, and in worsening global economic environment, they led to serious crisis which required providing financial assistance to economies concerned.

Large macroeconomic imbalances may also undermine the stability and functioning of the whole EMU and affect confidence in the euro. Thus, for the solution of the crisis and successful functioning of the euro area in the long term, it is of utmost importance to eliminate or reduce the existing imbalances within the monetary union, using the appropriate governance and policy mix. The new procedure for preventing and correcting macroeconomic imbalances in the euro area could facilitate such adjustments, prevent macroeconomic imbalances from re-emerging and contribute to sustainability of the EMU, provided that the new governance framework is used effectively and takes into account the real causes of the eurozone crisis, i.e. understands the imbalances as a symmetric phenomenon requiring a coordinated cross-country approach.

## Note

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